# THEORETICAL CONSIDERATIONS

# The Complexity of a Diverse Moral Order

#### GERALD GAUS\*

#### ABSTRACT

This essay explicates and defends what I call the "New Diversity Theory," which analyzes moral diversity not as moral reasoning gone awry, or even as a feature of free societies to be managed, but as a fundamental moral phenomenon. Under New Diversity Theory, moral diversity is not simply a challenge to reasonably stable moral order, but a critical resource for free societies to discover better ways of living. Parts I–III analyze the core idea of New Diversity Theory: moral perspectives. Part IV shows how a morally diverse system can form a robust moral order. Part V then examines a critical implication of New Diversity Theory: the social morality of a free society is, strictly speaking, a complex phenomenon. Part VI briefly concludes with a few remarks about the tasks of moral, social, and political philosophy in New Diversity Theory.

#### TABLE OF CONTENTS

Intr	ODUC	CTION	646			
I.	Div	VERSE MORAL PERSPECTIVES				
II.	CAT	TEGORIZATIONS	650			
	A.	Diverse Categorizations	650			
	B.	The Naïve Naturalist Response	651			
	<i>C</i> .	Diverse Categorizations and Similarity: Disagreement and Moral Gains	653			
III.	PREDICTIVE MODELS					
	A.	All Sensible Perspectives Employ Predictive Models	655			
	B.	The Diversity of Perspectives and Predictive Models	656			

<sup>\*</sup> My thanks to Jenann Ismael, with whom I conducted a graduate seminar on complexity at the University of Arizona—I learned heaps from her. Indeed, I learned from all the seminar participants, so thanks to one and all. I also greatly benefitted from the comments and questions of participants in workshops at the University of Groningen, New York University Law School, and the Georgetown Institute for the Study of Markets and Ethics. And, as always, my thanks to my good friend Fred D'Agostino for helping me think through these matters. © 2018, Gerald Gaus.

	<i>C</i> .	The Benefits of Predictive Diversity	658		
IV.	MORAL ORDER OUT OF DIVERSITY				
	A.	A Modern American Parable	658		
	B.	Reconciliation	661		
	<i>C</i> .	The Social Contract	664		
	D.	Must We Commence by Normalizing? The Self-Organization Insight	666		
	E.	Avoiding Moral Monoculture	669		
V.	MORAL DIVERSITY AND MORAL COMPLEXITY				
	<i>A</i> .	. The Impossibility of Contractual Choice Under High Diversity: Evaluating Single Rules			
	В.	The Impossibility of Contractual Choice Under High Diversity: Institutions	674		
	<i>C</i> .	How Emergence Undermines Traditional Political Philosophy	675		
VI.	_	MPLEX MORAL DIVERSITY AND THE TASKS OF SOCIAL	677		

#### Introduction

Russell Hardin once observed that "the worst failing of contemporary political philosophy is its frequent irrelevance to actual and plausible conditions." Contemporary moral philosophy too seems increasingly irrelevant to the world in which we live. Most moral philosophy blithely (or, alternatively, adamantly) adopts the Enlightenment presupposition that its aim is to uncover true moral beliefs—and since what is true is true for all—to discover universal true principles of morality, which will eventually be manifest to all parties who properly exercise their reason. While the modal moral theorist clings to this Enlightenment faith that free inquiry will lead to moral consensus, when we look about us we discern a far more complex pattern of emerging agreement about some matters such as the

<sup>1.</sup> Russell Hardin, From Bodo Ethics to Distributive Justice, 2 ETHICAL THEORY AND MORAL PRACTICE 399, 412 (1999). See also David Estlund, Prime Justice, in Political Utopias: Contemporary Debates 35–56 (Michael Weber & Kevin Vallier eds., 2017) (showing that one person's bug is another's feature and embracing the conclusion that a political theory may have "no practical value at all."); David Estlund, Human Nature and the Limits (If Any) of Political Philosophy, 39 Phil. & Pub. Aff. 207 (2011).

wrongness of racial discrimination, together with ever-deepening disputes about the place of humans in the universe, the roles and natures of the sexes, the role of the state, the relative importance of liberty and equality, and, indeed, the very nature of morality itself. "Western Judeo-Christian society" has not been transformed into a new universal rational secular order, but has dissolved into a complex pattern of religious, spiritual, and secular orientations—and each of these refracts into a spectrum of versions. Yet, for most moral philosophers, this is all basically an irrelevant empirical annoyance pointing to the folk's ignorance or stupidity; it is certainly not a basic datum for philosophical moral inquiry. What could the mere fact that actual people who think about their lives and morality come to very different conclusions tell the moral philosopher about Morality Itself?

The great contribution of the Rawlsian project was to take, as its basic supposition, that the exercise of human reason under free institutions leads to "intractable struggles" and "irreconcilable" conflicts of "absolute depth" about the nature of the universe, the world, value, and perhaps even justice.<sup>3</sup> Although Rawls and his followers certainly distanced themselves from the Enlightenment's assumption that moral consensus is the natural outcome of the free use of human reason, their project nevertheless remained largely a damage limitation exercise which sought to sort through the morass of disagreement to uncover a basic, shared conception of political justice.<sup>4</sup> Indeed, we might wonder what else could remain for moral and political philosophy once reasonable moral diversity is taken as a permanent feature of free societies. Surely it cannot be that moral diversity, as it were, all the way down, is a permanent feature of a free society. While many types of diversity—such as demographic diversity—are valuable, deep moral diversity seems to almost everyone not only socially damaging but ultimately incoherent.<sup>5</sup> Morality, it is assumed, necessarily implies some universality, while moral diversity implies non-universality. The upshot of these two thoughts—that the exercise of free human reason leads to disagreement, but justice must be endorsed by all reasonable people—led the Rawlsian project to

<sup>2.</sup> Survey research indicates clear moral differences throughout the world. See, e.g., American-Western European Values Gap, PEW RESEARCH CENTER (Feb. 29, 2012) http://www.pewglobal.org/2011/11/17/the-american-western-european-values-gap/ [https://perma.cc/U3HX-82JG]; Richard Shweder, Manamohan Mahapatra & Joan G. Miller, Culture and Moral Development, in The EMERGENCE OF MORALITY IN YOUNG CHILDREN 1 (Jerome Kagan & Sharon Lamb eds., 1987); JONATHAN HAIDT, THE RIGHTEOUS MIND: WHY GOOD PEOPLE ARE DIVIDED BY POLITICS AND RELIGION 95–188 (2012).

<sup>3.</sup> JOHN RAWLS, POLITICAL LIBERALISM xvi, 4 (expanded ed. 2005).

<sup>4.</sup> This is not to say this project succeeded; as it evolved, at every juncture where it seemed that agreement could be secured, yet deeper diversity revealed itself. *See* Gerald Gaus & Chad Van Schoelandt, *Consensus on What? Convergence for What? Four Models of Political Liberalism*, 128 U. CHI. J. ETHICS 145 (2017).

<sup>5.</sup> This certainly was, at least at one point, the view of Haidt. See, e.g., Jonathan Haidt, Evan Rosenberg & Holly Hom, Differentiating Diversities: Moral Diversity Is Not Like Other Kinds, 33 J. APPLIED SOC. PSYCHOL. 1 (2003); Jonathan Haidt, Invisible Fences of the Moral Domain, 28 BEHAV. & BRAIN SCI. 552 (2005). My thanks to Piper Bringhurst for discussions on this point.

marshal its complex philosophical machinery into justifying ever-thinner, rock-bottom consensus conclusions.<sup>6</sup>

In this essay I explore what I call the "New Diversity Theory." Parts I through IV draw together analyses from several works and authors to help articulate this new paradigm. The crux of this approach is to analyze moral diversity not as moral reasoning gone awry, or even as a feature of free societies to be managed, but as a fundamental moral phenomenon. Moreover, the theme of New Diversity Theory is that moral difference is not simply a challenge to reasonably stable moral order (though it certainly can be), but a critical resource for free societies to discover better ways of living together under conditions of limited knowledge and an unpredictable environment. Part I then presents the core idea of New Diversity Theory: moral perspectives. We shall see that moral diversity is itself multifaceted. Parts II and III analyze two of these facets: categorizations and predictive models. These two parts provide a partial answer to the common sense worry that it is incoherent to even want moral diversity: we can make better moral judgments when others see things differently. Part IV continues this reply, showing how a moral system characterized by evaluative and other types of diversity can form a robust moral order. Having defended the benefits and coherence of moral diversity, Part V examines a critical implication of New Diversity Theory: the social morality of a free society is, strictly speaking, a complex phenomenon. Part VI briefly concludes (this rather long essay) with a few remarks about the tasks of moral, social and political philosophy in New Diversity Theory.

#### I. DIVERSE MORAL PERSPECTIVES

Recent analyses of diversity have employed the idea of "perspective." For present purposes, I assume a model of a moral perspective of person i that has six elements:

- I. A set of evaluative standards, values, judgments and/or normative principles.
- II. A method for arriving at and modifying these standards, etc.

<sup>6.</sup> In place of the original aspiration to justify justice as fairness *over* alternatives, by the end of the project what is left is a vague argument for a broad "family" of liberal conceptions, of which Rawls's two principles are but one member. *See* Gaus & Van Schoelandt, *supra* note 4.

<sup>7.</sup> For valuable contributions to this new approach, see FRED D'AGOSTINO, FREE PUBLIC REASON (1996); Fred D'Agostino, *How Can We Do Political Philosophy?*, 5 COSMOS + TAXIS 29 (2018); RYAN MULDOON, SOCIAL CONTRACT THEORY FOR A DIVERSE WORLD (2016); JULIAN MÜLLER, POLYCENTRIC DEMOCRACY (forthcoming 2019); Brian Kogelmann, Agreement, All the Way Up: An Essay on Public Reason and Theory Choice, (2017) (unpublished Ph. D. dissertation, University of Arizona) (on file with the University of Arizona).

<sup>8.</sup> See, e.g., Muldoon, supra note 7; Ryan Muldoon, Perspectives, Norms and Agency, 34 Soc. Phil. & Pol'y 260 (2017); Müller, supra note 7; Scott E. Page, The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies (2007); Hélène Landemore, Democratic Reason (2013). I have employed the idea extensively in Gerald F. Gaus, The Tyranny of the Ideal: Justice in a Diverse Society (2016).

- III. A set of categorizations of the natural and social world. These categorizations must:
  - (i) determine the morally relevant features of the world (e.g., states of affairs, agents, actions, character traits, etc.) for any
  - (ii) judgment/action-context,  $J_X$ . A judgment/action context (e.g., " $\phi$  is an action that involves harm to another, and so is of moral relevance;" "X is an institution of the basic structure, and so relevant to social justice.") is itself a categorization.
- IV. A set of options  $\{\alpha, \beta, \gamma...\}$  in any given judgment-action context,  $J_X$ .
- V. A set of predictive models, which take the set of options  $\{\alpha, \beta, \gamma...\}$  and predicts for each, the social world(s)  $\{S_1, S_2, S_3...\}$  that would be produced (by each option).
- VI. A function, which takes features **I**, **III**, **IV** and **V** and applies them to the resulting social worlds  $\{S_1, S_2, S_3...\}$  yielding moral ranking of at least some worlds. A perspective may generate multiple non-aggregated rankings based on different evaluative standards (feature **I**), e.g., a justice ranking, a virtue ranking, and so on.

I certainly do not claim that this model perfectly fits every recognizable moral view. The model is by no means intended as a set of necessary and sufficient conditions for a view to constitute a person's "moral theory": the aim is to regiment our analysis, not to stipulate what constitutes a moral view. Many of the conditions could be relaxed. For example, the "function" in feature **VI** might be no more than "an intuition" or a guess. The aim is to get clearer about the moving parts of a typical view which: (a) has a set of standards (and some idea about how to modify it), (b) looks at the world, identifying contexts for moral decisions, (c) in any given context, examines the options, considers the social world that each option would produce, and (d) makes a decision/judgment about the morality or justice of the various options. I propose that a wide variety of moral viewpoints could be modeled along these lines.

Already we see a benefit of taking a more formal view: moral diversity can arise from differences in any of these elements. Too often real moral disagreement is thought to arise only from disagreements about feature **I**, our basic values, moral standards and principles. <sup>10</sup> This has been the traditional focus of pluralistic

<sup>9.</sup> Some moral perspectives might omit a feature. Or we might add features such as the search heuristics. See infra Section III.C.

<sup>10.</sup> Sometimes disagreement about ultimate standards of evaluation are said to be "deep," as opposed to those arising from mere "empirical facts," which are understood as "shallow"—as if different understandings of the world we inhabit and the way it works never go to one's critical scientific, metaphysical, and religious commitments. In any event, I put aside claims about what is shallow and what is deep, matters which are themselves internal to a perspective. *See* GERALD F. GAUS, CONTEMPORARY THEORIES OF LIBERALISM 129–31 (2003).

analyses of political morality. Once we appreciate the diversity of sources of perspectival diversity, we see that any hope to contain "reasonable disagreement about justice" to a small number of views looks quite forlorn. Suppose that on each of the six elements there are ten reasonable positions, and that all combinations of the reasonable positions are themselves reasonable: this yields 1,000,000 reasonable perspectives. If we make the very strong assumption of *complete agreement* on evaluative standards, we still have 100,000 distinct reasonable moral perspectives. Omit feature II, and we still have 10,000 reasonable moral perspectives. Once the sources of moral diversity are recognized, it is well-nigh impossible to fulfill the hopes of so many Rawlsians that there would be only a modest "family" of reasonable perspectives on justice. As we shall see in Part IV, this does not imply that consensus on basic rules is impossible, only that such consensus cannot plausibly be secured by supposing that the diversity of moral perspectives is modest.

#### II. CATEGORIZATIONS

A moral or political philosopher resisting this plethora of diversity is apt to deny that there are so many sources of respectable moral diversity. It would be tedious to canvass all the elements of a perspective to show their importance, but let us focus on two that may seem contentious: diverse categorizations (this part) and predictive models (Part III).

# A. Diverse Categorizations

One cannot, I would venture, even begin to understand the intractable dispute about the ethics of abortion unless one firmly keeps in mind that the protagonists categorize the world in deeply different ways. Many opponents of abortion rights understand an embryo to be ensouled: their world contains the category "being with a soul" that, on their moral perspective, is intimately linked to rights of a person. Proponents of abortion rights insist that an embryo is not a person, employing a naturalistic conception of a person that has no room for the category "ensouled" (or a number of other related categories), hence the utter futility of this long, very angry dispute, which still would be intractable if all the parties accepted the same set of evaluative standards. Or consider the categorization "homophobe" employed by most "progressives." Conservative criticism of homosexuality is thus categorized as a mental disorder (a phobia), indicating that the criticism is irrational and outside bounds of rational disagreement. On the other hand, the conservative often invokes the category of an "impure" or "blasphemous" action—categories that have little or no place in a progressive's understanding of the world.<sup>12</sup>

<sup>11.</sup> See George Crowder, *Pluralism*, in The ROUTLEDGE COMPANION TO SOCIAL AND POLITICAL PHILOSOPHY 353 (Gerald Gaus & Fred D'Agostino eds., 2013). For a nuanced discussion, see Landemore, *supra* note 8, at 213–19.

<sup>12.</sup> See HAIDT, supra note 2, 131–49. When it comes to the environment and food consumption, notions of purity may, after all, be invoked by the progressive.

## B. The Naïve Naturalist Response

While to some of us the importance of categorizations seems manifest, moral and political philosophers are apt to dissent, insisting that all such disagreements can be reinterpreted as familiar differences in evaluative standards or tractable disputes about the nature of the world. The opponents of abortion, it might be claimed, ascribe rights to "a clump of cells" while pro-choice advocates do not (a moral dispute); or "homophobe" can be said to describe a medical condition that further scientific inquiry will either confirm, or not.

Once we have arrived at this sort of disagreement, further progress is unlikely to be made by looking at specific cases, for the dispute is about how we are to interpret the cases. Going deeper, the rejection of categorization as an independently significant part of a moral perspective would certainly make sense if something along the lines of what we might call "Naïve Naturalism" held. This view posits:

- 1. The world is ultimately constituted by all the facts there are (the complete set of facts);
- 2. Science is the progressive uncovering of increasingly accurate representations of these facts; each new scientific discovery presents a set of facts that strictly dominates earlier versions (the later includes all what is correct in the earlier version, and adds to it).
- Sound reasoners who (a) accept the best current science describing the world, and (b) have the same evaluative standards, will agree in their moral judgments.

On Naïve Naturalism, scientific progress secures ever-better resolutions of the facts that compose the world. It is as if blurry and confused pictures become increasingly better representations of what *is*. If Naïve Naturalism held, disputes about categorizations would be disputes that science ultimately will resolve, and a reasonable person would have no grounds for not embracing science's current picture, since it is more accurate than previous ones. Perspectives that accept the best current science thus would have the best available picture of the world, and so have no disputes about the proper description of the natural or social world—only about the evaluation of the facts. All sensible moral disputes would have to derive from their evaluative standards.

Naïve Naturalism—though seldom stated quite this baldy—is, I would venture, at the root of a great deal of secular moral theory, and its almost obsessive

<sup>13.</sup> It appears to also suppose that (i) social facts are irrelevant to moral judgment, (ii) they are themselves subject to Naïve Naturalism's view of scientific discovery, or (iii) they are reducible to the natural facts subject to science. None seems plausible. Stanley Benn and I long ago explored the relation of social categorizations (social facts) and normative theory. *See* PUBLIC AND PRIVATE IN SOCIAL LIFE 3-65 (S.I. Benn & G.F. Gaus eds., 1983). On the implausibility of (*iii*), see EMILE DURKHEIM, THE RULES OF SOCIOLOGICAL METHOD (Steven Lukes ed., W. D. Halls trans., The Free Press 1982) (1895).

attention to differences in evaluative standards. After all, if how we conceive of the world really is uncontroversial, what else but evaluative standards could cause deep reasonable disagreements? I believe this radically misconstrues science, and does so because it fundamentally misconstrues the relation between discovery, theory, and categorization. As Hayek stressed, all categorization depends on ignoring some differences (which become non-differences) and focusing on others. At its most basic level, categorization is a many-to-one mapping: members of a set  $\{a, b, c, d, e\}$  are mapped onto categories W and W, such that W and W and W and W are the same; any difference between them is lost (an embryo W is just a clump of cells, like a tumor). Yet on another set of categories, say W and W and W are different (perhaps entirely different) phenomena (perhaps one has a soul and so is the height of creation).

Kuhn intended to capture in his idea of a paradigm the relations of similarity and categorizations at work in a scientific community. 16 Symbolic labels (based on relations of similarity) are applied in a uniform way, e.g., in the form of equations, by the community to describe nature. Science often proceeds by analogies: categories in a known area are employed to understand an unfamiliar one. Following Mary Hess, in such scientific explanations we can distinguish primary and secondary systems: the primary system is the phenomenon (A) to be explained, the secondary system is the explanation of A in terms of the categories of (B). "Sound (primary system) is propagated by wave motion (secondary system)."<sup>17</sup> Metaphors are critical in suggesting analogies, such that the primary system can be understood in terms of the categories of some other system. For example, early electricians sought to understand electrical phenomena (A) under the category "liquid" (B); and since B could be bottled, so should we be able to bottle A—hence their successful effort to develop the Leyden jar. 18 Different paradigms, often building on different metaphors thus, in a straightforward sense, categorize the world in importantly different, and partly incommensurable ways. The same phenomenon in one paradigm may be different in another. An upshot is that even when the community agrees that a new paradigm solves its problems better than an earlier paradigm, there is a loss of knowledge, in the sense that ways of describing nature that made enlightening distinctions are no longer available.

<sup>14.</sup> F.A. HAYEK, THE SENSORY ORDER 48–52 (1952).

<sup>15.</sup> See PAGE, supra note 8, 73–89. This is entirely consistent with there being one, real world that we all inhabit, and we all recognize this to be the case.

<sup>16.</sup> See, for example, Thomas S. Kuhn, The Structure of Scientific Revolutions 107, 148, 167 (2d. ed. 1970) and especially his *Second Thoughts on Paradigms*, *in* The Essential Tension 293 (1977).

<sup>17.</sup> MARY B. HESSE, MODELS AND ANALOGIES IN SCIENCE 158–89 (1963).

<sup>18.</sup> KUHN, *supra* note 16, at 17.

# C. Diverse Categorizations and Similarity: Disagreement and Moral Gains

Naïve Naturalism notwithstanding, to conceive of the world is to categorize, and those who categorize differently, even if they share the same evaluative standards, can disagree in their moral judgments. Now, the upshot of a system of categories is not simply so—categorical. A system of categories reveals meaningful structure in the world, and a critical component of this structure is relations of similarity. Once one has categorized a phenomenon, relations of similarity are generated. Suppose, for example, one's category of "punishment" is characterized simply by incarceration due to criminal behavior. This categorization also implies similarity judgments about punishments: those that involve similar lengths of incarceration are similar punishments, while those that involve very different lengths are very dissimilar punishments.

In a world in which we are all searching for better options under conditions of severely limited information, individuals with different categorizations and so different understandings of similarity can sometimes assist each other in finding better moral options. In difficult choice situations—including moral choices agents engage in some search routine, knowing the value of some options, and expending resources to see if they can find better ones. We do not have full knowledge of all the options confronting us: we explore some options, see how well they score, and see if modifications improve things or make them worse. When a person searches for a better option in the face of uncertainty, she starts from what she knows and typically moves on to examine variations. Already knowing option  $\alpha$ , determining the value of similar option  $\beta$  is much more tractable; much of  $\beta$  is already captured by what one knows of  $\alpha$ . Given the structure of the world, the obvious alternative to  $\alpha$  is  $\beta$  (as opposed to, say,  $\omega$ , which seems to have hardly anything in common with  $\alpha$ —why would one investigate that?). On these searching models one keeps looking to see if variations of wellunderstood options improve matters.

Consider a mundane case: a manufacturer searching for innovations in product T. The advice to formulate an unordered list of possible variations of T, and then take the best choice, is not of much help; the manufacturer cannot assign values to many of the options. Indeed, she does not yet even have the blueprints for many variations. So here is an entirely sensible approach to the development problem. Have most of the research teams work on near improvements (slight modifications of the technology underlying T); because there is so little fiddling with the structure of the present T we will often find the new versions slightly better or slightly worse, and can further build on the slightly better ones, and then

<sup>19.</sup> It is more plausible than one might think that categorizations are one-dimensional (say, punishment only involves incarceration). While in their informal classifications people seem to employ family resemblances, subjects from around the world gravitate to single-dimensional classification systems when they are forced to think formally about their classifications. When asked to sort elements in a domain, participants repeatedly select some single common dimension and sort according to it. *See* GAUS, *supra* note 8, app. A.

build on some of those, etc. This is a conservative "climb the gradient" heuristic, always seeking local improvements. But we may get stuck at a product for which no small improvements could be made (yet is not the optimal T). Think of a Sony team that might have developed the best possible Betamax recorder: all modest modifications would have made for a worse video player. So the manufacturer may also wish to invest in an R&D department that has some teams working on more radical innovations (say, laser discs), some of which could result in really high values, but it is almost impossible at this point to make sound judgments about whether they will pan out. Here, we are dealing with hunches, hopes, and dreams—not probability assignments. In the case just described, we are searching the value of options with certain structures, and these structures are the very properties that yield valuable products. This structured space thus *orients* the product search. It is important that in this case one's optimization problem *starts* from a location (a place in the structure), and we are thinking of how to best move *given where we already are*.

Now suppose that we have teams that employ different categorizations of T such that one team orders the possible products (in terms of similarity),  $\{T_1, T_2, T_3, T_4, T_5\}$  while another orders them  $\{T_1, T_2, T_5, T_4, T_3\}$ . The first team investigates them roughly in order, so starting with  $T_1$  they move on to  $T_2$ ; if it improves upon  $T_1$ , they may move on to consider  $T_3$ . Suppose  $T_3$  is far worse than  $T_2$ , and when they consider  $T_4$  it is even worse than  $T_3$ . They may stop their search at this point, concluding that for now  $T_2$  is best they can do. But the second team, given their different classifications, after looking at  $T_2$ , sees  $T_5$  as a small variation, and finds  $T_5$  a great improvement on  $T_2$ . If the two teams share a high evaluation of  $T_5$ , the different categorization of the second team benefits the first, revealing a better option that they did not think it worthwhile to investigate. Scott E. Page and Lu Hong can be understood as exploiting this insight in their innovative and important work, specifying the precise conditions under which different perspectives are guaranteed to aid each other in finding the best alternatives to a common problem.

<sup>20.</sup> This, perhaps, is the role of ideal political philosophy. See generally id.

<sup>21.</sup> See Scott E. Page, Diversity and Complexity 90–95, 217–27 (2010).

<sup>22.</sup> See Lu Hong & Scott E. Page, Problem Solving by Heterogeneous Agents, 97 J. ECON. THEORY 123 (2001); Lu Hong & Scott E. Page, Groups of Diverse Problem Solvers Can Outperform Groups of High-Ability Problem Solvers, 101 PROC. NAT'L ACAD. SCI. U.S. 16,385 (2004). The Hong-Page conception of a perspective is importantly different than that offered here: I have stressed that those with different categorizations may well disagree in their evaluations of an option, and different similarity judgments arise out of different categorizations. Hong and Page begin with a one-to-one mapping of objects on to a language; in their model, those who concur on the other elements of a perspective but have different similarity judgments will always agree on the value of any specific option. See PAGE, supra note 8, 23–51. I have argued that this is too strong an assumption in most moral and political contexts; on the analysis offered here it is thus contingent to what extent those with different similarity orderings will concur on the value of an option. See GAUS, supra note 8, 73–89. Page notes some of the differences between his and my notion of a perspective in The Imperative of Complexity, 5 COSMOS + TAXIS 4 (2018). On some formal limits of the Hong-Page proofs, see John Weymark, Cognitive Diversity, Binary Decisions, and Epistemic Democracy, 12 EPISTEME, 497 (2015).

Once again, resistance comes from moral and political philosophers. Among the more sophisticated objections are those based on commitment to what might be called the "simple optimization model." This more familiar approach, informing neo-classical economics and rational choice theory, supposes that agents in a choice situation confront an unordered set of options, assigning an expected score (in terms of, say, justice) to each. If they can do all that they confront a relatively simple optimization exercise: choose the option with the highest expected justice. Now in some cases we can approximate this and simple optimization models work well. However, when the justice of what I do depends on what others do, it becomes increasingly difficult to accurately predict the expected justice of many of my options, much less an entire feasible set.<sup>24</sup> As we have learned from Herbert Simon, real agents have limited cognitive resources and seldom find the best solution.<sup>25</sup> They must employ resources searching for unknown, but possibly, better options; for them it is organizing the search, not the final optimizing selection, that is the critical problem. Some are more cautious, exploring only until further moves make things worse. Others, hoping for excellent unseen options, are willing to explore some worse options for a while before quitting—at the risk of great wasted time. But in a world where we seldom have a clear idea of the set of options or most of their values, uncovering better solutions implies searching the unknown. And it is through collective searching that diverse agents can do well.

This is critical. In contrast to traditional reasonable disagreement analyses, New Diversity Theory stresses the ways in which diversity not only leads to problems of securing a just social order, but the conditions under which it can induce better moral outcomes for all.<sup>26</sup> This is not to be Pollyannaish: diversity certainly can be a barrier to a just social order as well as a resource. The point is not to defend diversity as always beneficial, but inquire into which patterns of diversity impair moral order and improvement, and which encourage them.

#### III. PREDICTIVE MODELS

#### A. All Sensible Perspectives Employ Predictive Models

Let us (this time more briefly), consider another unfamiliar element of our model of a moral perspective—predictive models (Part I, feature V). Now the political philosopher resisting the multi-dimensionality of diversity might insist

<sup>23.</sup> David Wiens and I discuss the relative merits of these two approaches. See his thoughtful essay defending a simple optimization model, *The Tyranny of a Metaphor*, 5 Cosmos + Taxis 13 (2018); for my response, *see* Gerald Gaus, *Political Philosophy as the Study of Complex Normative Systems*, 5 Cosmos + Taxis 62 (2018).

<sup>24.</sup> The simple optimization model can accommodate lack of information in terms of risk—what we know we do not know—but has great difficulty making sense of deep uncertainty about what options and their value—what we don't know we don't know. *See infra* Part IV. On uncertainty, see FRANK KNIGHT, RISK, UNCERTAINTY, AND PROFIT 74—85 (Augustus M. Kelly 1964) (1921).

<sup>25.</sup> See Herbert A. Simon, The Sciences of the Artificial 119-24 (3d ed. 1996).

<sup>26.</sup> See, e.g., MULDOON, supra note 7, 38–61.

that, while "consequentialist" theories must employ such models, "deontological" ones do not. This is surely too simple. Consider Rawls's interpretation of Kant's universal law formulation of the categorical imperative, which he models in terms of a four-step "CI procedure." The first three steps of the CI procedure are fairly straightforward:

(1) I am to do X in circumstances C to bring about Y. (Here X is an action and Y a state of affairs). The second step generalizes the maxim at the first to get: (2) Everyone is to do X in circumstances C to bring about Y. At the third step we are to transform the general precept at (2) into a law of nature to obtain: (3) Everyone always does X in circumstances C to bring about Y (as if by a law of nature).<sup>27</sup>

At the fourth step we are to consider the "perturbed social world" that would result from the addition of this new law of nature; we seek to understand the new "equilibrium state" on which this perturbed social world would settle. We are then to ask ourselves whether, when we regard ourselves as a member of this new social world, we can "will this perturbed social world itself and affirm it, should we belong to it." Manifestly, on Rawls's analysis of Kant's "deontology," our endorsement of a moral imperative takes place against the background of a predictive model of the social world that would result from introducing a maxim. To understand what principles are just, we must predict the results of the new social world that takes them as a law of nature.

It is hard to imagine a plausible moral perspective that makes no use at all of predictive models: such a perspective must insist that it is *never* morally relevant what the effects of a moral judgment, moral principle, or action will be. "All ethical doctrines worth our attention take consequences into account in judging rightness. One which did not would simply be irrational, crazy."<sup>29</sup>

## B. The Diversity of Perspectives and Predictive Models

That predictive models are required by a sensible perspective does not imply a diversity of them. Recent political philosophy has tended to embrace a distinction between the analysis of "desirability" and "feasibility." On the stark version, political philosophers investigate desirability (a normative question); they then hand off their "findings" to social scientists who investigate the "feasibility" of their desirability (or other normative) judgment.<sup>30</sup> In principle, all political

<sup>27.</sup> JOHN RAWLS, *Themes in Kant's Moral Philosophy*, in RAWLS: COLLECTED PAPERS 497, 499 (Samuel Freeman ed., 1999).

<sup>28.</sup> Id. at 500.

<sup>29.</sup> JOHN RAWLS, A THEORY OF JUSTICE 26 (Rev. ed. 1999).

<sup>30.</sup> For a recent sophisticated analysis that is skeptical of starker versions of this view, while still friendly to the general idea, see John Hamlin, *Feasibility Four Ways*, 34 Soc. Phil. & Pol'y 209 (2017). For an analysis that calls for political philosophers to engage with social science, see David Wiens, *Demands of Justice, Feasible Alternatives, and the Need for Causal Analysis*, 16 ETHICAL THEORY & MORAL PRAC. 325 (2013).

philosophers could employ the same social scientist, employing "the best" predictive model to "check for feasibility."

The division of cognitive labor should certainly not be belittled—nevertheless, the common idea that a political philosopher can perform his normative work and then hand it off to the expert social scientist to check for feasibility typically manifests Naïve Naturalism: there is just one uncontroversial social world to be investigated, and the best social scientist has the best understanding of it, which all should use. But to any perspective, what constitutes the best predictive model depends on the way the perspective categorizes the world. If, for instance, a perspective conceptualizes a certain problem as pertaining to mutual benefit and exchange, it is apt to employ economic or rational choice models; the features of the world economic models pick out as variables in prediction will be features deemed important by the moral perspective. In contrast, a perspective that views (in some sense) "the same economic problem" as centered on relations of power and domination may well employ sociological models because they, not economic models, pick up on the relevant categories. These economic and sociological models have different features and strengths—the moral or political philosopher does not simply go shopping for the unequivocal "best model."31

I do not think that this observation is restricted to normative theories or the social sciences (thus it is not closely related to the long and inconclusive debate on whether the social sciences are "value free"). Even natural science is based on a complex interaction between theory, and the categories and processes it postulates, and the construction of instruments to observe these categories. What constitutes an observation is theoretically-informed; the theory predicts what will happen in a world with certain entities. Kuhn observes:

After about 1630, for example, and particularly after the appearance of Descartes's immensely influential scientific writings, most physical scientists assumed that the universe was composed of microscopic corpuscles and that all natural phenomena could be explained in terms of corpuscular shape, size, motion, and interaction. That nest of commitments proved to be both metaphysical and methodological. As metaphysical, it told scientists what sorts of entities the universe did and did not contain: there was only shaped matter in motion. As methodological, it told them what ultimate laws and fundamental explanations must be like: laws must specify corpuscular motion and interaction, and explanation must reduce any given natural phenomenon to corpuscular action under these laws. More important still, the corpuscular conception of the universe told scientists what many of their research problems should be.<sup>32</sup>

A prediction that referred to an "occult quality"—such as gravity<sup>33</sup>—did not enter these models, just as corpuscular action was not predicted in later models.

<sup>31.</sup> See PAGE supra note 8, at 286; GAUS supra note 8, at 138–39.

<sup>32.</sup> Supra note 16, at 41.

<sup>33.</sup> Id. at 105.

# C. The Benefits of Predictive Diversity

Even without these deeper sources of diversity, should two perspectives agree in all other aspects of their perspectives they may well employ different predictive models. Some models may be good at predicting long-run tendencies, others better over the short-term; some are excellent in more-or-less stable environments but cannot accommodate the possibility of rare events. Page's work is notable in consistently calling our attention to the collective benefits of multiple predictive models.<sup>34</sup> According to the Diversity Prediction Theorem, the collective error of an aggregation of predictions is always less than the average predictive error. 35 If we take the average of how wrong each model is, this is greater than the predictive error of the aggregation of predictions. The collective prediction will always beat the average of individual predictions. This is an important result: even if our predictive models are not very good, a diverse society can draw on diverse predictive models. Moreover, given this result there will often be a loss of collective predictive power if everyone adopts the same predictive model—even if it is the best in the set.<sup>36</sup> And there certainly will be no advantage to everyone adopting the average prediction rather than each using her own preferred model and then drawing on the results of others. In other contexts, Page has shown the conditions under which it is better to employ diverse models than for all of us to embrace the best model.<sup>37</sup> Again, the slogan of the New Diversity Theory: a diverse population can achieve better answers than a homogeneous population, even if the homogenous population has adopted the best available model or perspective.

## IV. MORAL ORDER OUT OF DIVERSITY

#### A. A Modern American Parable

Having articulated some of the commitments and claims of the New Diversity Theory, I turn to the incoherence worry. Whatever the advantages of diversity in other aspects of human life, moral diversity has consistently been thought to be antithetical to social cooperation and, indeed, to the very idea of morality. This is not a concern to be lightly dismissed. Under what conditions does moral diversity undermine moral order?

Moral diversity runs the risk of severe social disorder if individuals in a population morally deliberate only according to:

<sup>34.</sup> See PAGE, supra note 8.

<sup>35.</sup> See id. at 205-12; GAUS, supra note 8, app. B.

<sup>36.</sup> See Hélène Landemore & Scott E. Page, Deliberation and Disagreement: Problem Solving, Prediction, and Positive Dissensus, 14 POL., PHIL. & ECON. 229 (2015). A truly excellent predictive model can beat the collective prediction, but the collective prediction will beat the average of diverse individual predictions.

<sup>37.</sup> Scott E. Page, Not Half Bad: A Modest Criterion for Inclusion, in Complexity and Evolution 319 (David S. Wilson & Alan Kirman eds., 2016).

The "I conclude we ought" implies "I ought" View: As a competent moral agent, if (i) Alf conscientiously deliberates and concludes that, given what he takes to be the correct normative premises and relevant empirical information, one ought to  $\varphi$  (ought not  $\varphi$ , or may  $\varphi$ )<sup>38</sup> in conditions C, where this does not require taking account of the conclusions of the moral deliberations of others and (ii) he reasonably concludes that morality instructs that we all ought to  $\varphi$  in conditions C, then (iii) he ought to  $\varphi$  in circumstances C, even if others fail to do as they ought.

It is important that on the "I conclude we ought implies I ought" View, Alf does not typically assert that we all ought to  $\varphi$  in C because he has concluded that we ought to  $\varphi$ : Alf may believe that "we ought to  $\varphi$ " in C because it is a moral truth that we ought to, or that an impartial spectator would approve of our  $\varphi$ -ing. The important point is that once Alf conscientiously comes to the belief that one ought to  $\varphi$  in C—it is, we might say, his best judgment about the morally best thing to do—then, as a competent moral agent, he will justifiably  $\varphi$  in circumstances C, and indeed insist that we all do so, for that is what we ought to do. And, as I have stressed, none of this necessitates (though it may be epistemically recommended) that Alf factors into his moral deliberation the moral conclusions of others.

To many, the "I conclude we ought implies I ought" View expresses the core of morality and articulates an ideal of the sanctity of conscience. The moral agent thinks through how we should act (say, by employing the Four Step CI-Procedure to a judgment about what morality or justice requires, which entails that we all ought to do whatever that is, which in turn entails that I (the agent) ought to do that—*even if no one else does*. Thus, Cristina Bicchieri insists, morality is "unconditional." "Under normal conditions," she writes, "expectations of other people's conformity to a moral rule are not a good *reason* to obey it. Nor is it a good reason that others expect me to follow a moral rule." On this view, then, morality calls for an action that one can secure on one's own—one does not need the cooperation of others to do the moral thing (which is not to deny it would be even better if they too did the moral thing). Bicchieri thus likens morality to brushing one's teeth: one can secure the point of the action without the participation of others, even when the judgment is about what we all should do. \*43

<sup>38.</sup> Henceforth I shall not state these alternatives, assuming that they are implicit.

<sup>39.</sup> I assume here that conditions C are so defined that typical justifications for not  $\Phi$ -ing (e.g., duress) would show that C was not met. Recall that C cannot include the deliberations of others about what is moral in this circumstance. It can, though, take account of what Alf expects others to do.

<sup>40.</sup> I criticize this view in *Private and Public Conscience*, in Reason, Value, and Respect: Kantian Themes from the Philosophy of Thomas E. Hill, Jr. 135 (Mark Timmons & Robert Johnson eds., 2015).

<sup>41.</sup> See supra Section III.A.

<sup>42.</sup> CRISTINA BICCHIERI, THE GRAMMAR OF SOCIETY 21 (2006).

<sup>43.</sup> *Id.* at 20. I focus on Bicchieri, rather than an orthodox moral philosopher, as her own work on social norms stresses the necessity of social cooperation. But when it comes to morality, even she conceives of it as inherently personal. I am not denying that there are some parts of morality that are

FIGURE 1. Go Your Own Way Game

Individuals wedded to the "I believe we ought implies I ought" View will end up playing the Go Your Own Way Game depicted in Figure 1.

In the interaction of Figure 1, each orders the outcomes:  $(1^{st})$  we act on (my view of) social morality or justice<sup>44</sup> ( $\alpha$  for Alf,  $\beta$  for Betty);  $(2^{nd})$  I act on (my view of) justice, the other fails to;  $(3^{rd})$  I act on the erroneous view and the other acts justly (at least someone does!); and  $(4^{th})$  no one does the just thing. In this game the sole equilibrium is that Alf acts on his view ( $\alpha$ ), and Betty acts on her view ( $\beta$ ), of justice. At either of the coordination solutions (when both play  $\alpha$  or both play  $\beta$ ), one of the parties would do better by changing his or her move, and acting on his or her favored interpretation of justice. So here even if the other does not do as you have concluded "we" ought, you still ought to do it. In this game each goes their own way.

Figure 1 captures a common philosophical understanding of moral disagreement. As one contemporary philosopher has (somewhat approvingly) put it, Alf and Betty are "fighting" it out as to who is morally correct.<sup>45</sup> If this is the typical interaction among morally diverse agents, a society would be morally disordered. Each stays true to her own conscience (i.e., acting on her own "I believe we ought" judgment), but each sees her neighbors as doing the unjust thing. Such a society is one of pervasive moral conflict.<sup>46</sup> Now perceived moral violations typically trigger punishments, if only in the form of gossip, ostracism, and (as we see

indeed inherently personal, such as seeking some of the moral virtues, where the aim of the agent is that *she* is courageous, trustworthy, or pure. As I have argued, no single theory encompasses all of what we call "morality." My concern in this essay is "social morality" or "justice"—notions I treat as roughly equivalent here. *See also* GERALD GAUS, THE ORDER OF PUBLIC REASON app. A (2011).

<sup>44.</sup> See id.

<sup>45.</sup> David Enoch sees such fighting as a distinct improvement on my account. *See* David Enoch, *The Disorder of Public Reason*, 124 ETHICS 141, 175 (2013).

<sup>46.</sup> See KEVIN VALLIER, MUST POLITICS BE WAR? (forthcoming 2018).

today), shouting and ridiculing.<sup>47</sup> If Alf and Betty take this step, they are all too likely to end up in actual conflict. Evidence indicates that when a person is "punished" for an act she does not deem wrong, she is apt to counter-punish, leading to cycles of conflict.<sup>48</sup> Alf screams "Evildoer!" at Betty, who does not see herself as doing anything wrong, so she retaliates against what she perceives as Alf's naked aggression, who responds to her new act of outrage with yet more punishment. Fox News supports Alf, *The New York Times* rallies to Betty: *The Times* publishes Op-Ed essays on "Why Alfites are so Immoral" while Fox questions whether Betty is really an American at all.

#### B. Reconciliation

Such moral disorder was the primary concern of the classical social contract theorists. In one way or another, Hobbes, Locke, Rousseau, and Kant believed that individuals' "private judgments" about morality or justice diverge, and, because of this, individual private judgment is an inappropriate ground—or at least an inappropriate sole ground—for demands of justice. 49 Kant famously insisted that, even if we imagine individuals "to be ever so good natured and righteous," when each does what "seems just and good to him, entirely independently of the opinion of others," they live without justice. 50 This apparently paradoxical conclusion—that a world of competent moral agents who acted only on their own sincere convictions about justice would live without justice. 45 —derives from two claims. First, it is taken as given that reasoned private judgments of justice inevitably conflict. As we saw in Part I, a moral perspective has many elements, and differences in any of these can lead to conflicting judgments in an action context. Second, it is assumed that a critical role of justice in our social

<sup>47. &</sup>quot;We do not call anything wrong, unless we mean that a person ought to be punished in some way or other for doing it; if not by the law, then by the opinion of his fellow creatures; if not by opinion, by the reproaches of his own conscience. This seems the real turning point between morality and simple expediency." JOHN STUART MILL, UTILITARIANISM (1863), reprinted in 10 THE COLLECTED WORKS OF JOHN STUART MILL 246 (J.M. Robson ed., 1965). This phenomenon of "moralistic aggression" is as ancient as morality itself, and especially prominent in matters of justice. For a psychological analysis, see Michael T. McGuire, Moralistic Aggression and the Sense of Justice, 34 Am. Behav. Scientist 371 (1991). For a path-breaking ethnographic account, see Christopher Boehm, Hierarchy in the Forest (1999).

<sup>48.</sup> See Astrid Hopfensitz & Ernesto Reuben, The Importance of Emotions for the Effectiveness of Social Punishment, 119 Econ. J. 1534 (2009); SAMUEL BOWLES & HERBERT GINTIS, A COOPERATIVE SPECIES 26 (2011).

<sup>49.</sup> For a comprehensive and detailed defense of this claim, see S.A. Lloyd, *Public Reason in Hobbes, in Public Reason in Political Philosophy 84* (Piers Norris Turner & Gerald Gaus eds., 2018); Gerald Gaus, *Locke's Liberal Theory in Public Reason, in id.* at 163; Christopher Bertram, *Rousseau on Public Reason, in id.* at 248; Oliver Sensen, *Kant on Public Reason, in id.* at 282. *See also* Gerald F. Gaus, *Public Reason Liberalism, in The Cambridge Companion to Liberalism 112* (Steven Wall ed., 2015).

<sup>50.</sup> IMMANUEL KANT, THE METAPHYSICAL ELEMENTS OF JUSTICE §43, at 116 (John Ladd trans., 2d ed. 1999).

<sup>51.</sup> I have defended this paradox in some depth. See Gerald Gaus, The Commonwealth of Bees: On the Impossibility of Justice-through-Ethos, 33 Soc. Phil. & Pol.'y 96 (2016).

lives is to adjudicate disputes about our claims and so coordinate normative and empirical expectations. For Kant, the problem of universal private judgment was that "when there is a controversy concerning rights (*jus controversum*), no competent judge can be found." Each, thrown back on her own reasoning, ends up in conflict, and ultimately unjust relations, with others. Understood thus, a necessary role of justice (or social morality) is to provide an interpersonally endorsed adjudication of conflicting claims. Securing justice is inherently something we do together. If no other good-willed and conscientious moral agent accepts that in circumstances C justice demands  $\varphi$ , Alf's  $\varphi$ -ing will not secure just social relations. Justice is understood as a property of social relations, not simply of individual actions—and that is why the simple unconditional view of morality is seen as deeply flawed.

Surely, though, this is just one more case of perspectival diversity about justice: some view it as essentially a property of personal action, others as a property of social relations that we bring about through our joint action. True enough: these views differ on what they see as the morally-relevant features of the world (feature III). We certainly cannot say that views of justice that see it as purely a quality of personal action are unintelligible. We can, though, say that in diverse societies those perspectives that view justice as, to significant extent, a property of social relations are able to secure the good of moralized social cooperation—they are able to employ justice as a source of cooperation, not primarily of conflict. Outside of contemporary philosophy, almost all analyses of human justice understand it as, first and foremost, the basis of human cooperation, and so critically involves social recognition and endorsement of its requirements.<sup>54</sup>

Those who suppose that justice is a social relation and so cannot be secured without the cooperation of others will play not the "Go Your Own Way Game" (which is apt to degenerate into a moralistic aggression game),<sup>55</sup> but rather the Reconciliation Game of Figure 2:

<sup>52.</sup> KANT, supra note 50.

<sup>53.</sup> See John Rawls, An Outline of a Decision Procedure for Ethics, 60 PHIL. REV. 177 (1951), reprinted in COLLECTED PAPERS 1 (Samuel Freeman ed., 1999).

<sup>54.</sup> This idea is everywhere. *See*, *e.g.*, Bowles & Gintis, *supra* note 48; Christopher Boehm, Moral Origins (2012); Philip Kitcher, The Ethical Project (2011). That justice is, at least partly, a social practice that involves coordinated expectations, though now perhaps a minority view in philosophy, was dominant in the middle of the last century. See, for example, John Rawls, *Justice as Fairness*, 14 Phil. & Pub. Aff. 223 (1985) *in* Collected Papers, *supra* note 53, at 47 (supposing explicitly that justice is a social practice); Kurt Baier, The Moral Point of View (1958) (concerning the relation between social morality and mores). *See also* Richard B. Brandt, A Theory of the Good and the Right 163–82 (1979). Thus Hayek's quip about the idea of "social justice": "[O]ne would have thought that all justice is a social phenomenon!" *Kinds of Rationalism, in* The Market and Other Orders 39, 40 (Bruce Caldwell ed., 2014). The idea that justice is a property of social relations can be traced back even further—to The Republic. *See* Plato, The Republic (G.R.F. Ferrari ed., Tom Griffith trans., Cambridge Univ. Press 2000) (c. 380 B.C.E.)

<sup>55.</sup> An all-too-familiar game—the Prisoner's Dilemma.

FIGURE 2. The Reconciliation Game

# **Betty**

_	r	1	1	· <u>2</u>
		$2^{\text{nd}}$		4 <sup>th</sup>
$r_1$				
	$1^{st}$		3 <sup>rd</sup>	
		3 <sup>rd</sup>		1 <sup>st</sup>
$r_2$				
	4 <sup>th</sup>		$2^{nd}$	
	$r_1$ $r_2$	1 <sup>st</sup>	$r_1$ $1^{\text{st}}$ $r_2$ $3^{\text{rd}}$	$r_1$ $1^{\text{st}}$ $3^{\text{rd}}$ $r_2$

 $r_1$  and  $r_2$  here designate rules. Once justice is understood as a social, cooperative relation, the focus of moral evaluation becomes rules, practices, or institutions that provide for relatively fine-grained mutual expectations of what others normatively expect of me, and what I expect of them. Critically, rules provide shared public categorizations that allow for coordination. And these in turn ground a practice of accountability, in which I know for which actions others will hold me accountable, and for which I will experience guilt and regret should I perform them. Under these conditions, moralistic responses to the violations of others stabilize rather than destabilize the order of cooperation.

In the Reconciliation Game, Alf still engages in "I believe we ought" reasoning, but it does not follow that this always provides sufficient reasons for him to act. On the basis of his reasoning, he concludes that a practice based on  $r_1$  best conforms to the demands of justice. Betty disagrees, endorsing  $r_2$  as the best social instantiation of justice. But in the judgment of both, just social relations can only be secured by joint action—again, neither can secure this alone. Because the crux of justice is this joint action they are forced to consider whether the joint action on the other's favored rule better satisfies justice than failure to coordinate on a joint action. They both might agree that there would still be *some* justice in unilaterally acting on his or her "I believe we ought judgment" (in

<sup>56.</sup> *See* GAUS, *supra* note 8, at 177–207.

<sup>57.</sup> I have made this argument in some depth. See GAUS, supra note 43, 54–69. Note that unless Alf and Betty morally endorse the same rule, even if they somehow managed to coordinate their actions, they could not maintain a practice of accountability; Betty might, for reasons of self-interest act on  $r_1$ , but that would not be sufficient for her to hold herself accountable for acting on it.

<sup>58.</sup> See Cristina Bicchieri, Eugen Dimant & Erte Xiao, Deviant or Wrong? The Effects of Norm Information on the Efficacy of Punishment, CTR. FOR DECISION RESEARCH AND EXPERIMENTAL ECON. (Nov. 2017), https://www.nottingham.ac.uk/cedex/documents/papers/cedex-discussion-paper-2017-14. pdf [https://perma.cc/3P2P-P3R9].

Figure 2, both rank this as their 3rd choice), but unilateral action simply cannot do much to secure justice. Alf (and Betty) asks himself (herself) two critical questions:

- (Q1) On my moral perspective, how important is the achievement of just social relations, as opposed to unilateral action on my "I believe we ought" judgment?
- (Q2) Given my "I believe we ought" judgment, how far is the other's preferred rule from mine—how much of a moral gap is there—in terms of the justice of the two rules?<sup>59</sup>

Their answers to these two questions determine whether they play the Go Your Own Way Game or the Reconciliation Game. The greater the importance of just social relations, and the smaller the gap, the stronger the tendency to play the Reconciliation Game.

#### C. The Social Contract

The importance of those with diverse moral perspectives coming to shared rules (practices, institutions) via the Reconciliation Game is at the heart of the social contract response to moral diversity. We might distinguish two routes to a social contract that expresses reconciliation: the *state of nature* and *reasonable population* versions. The first is best manifested by Locke, who stresses that the conflict engendered by each acting on natural law or justice as she sees it leads to such a morally disordered state that each sensible person will abandon her acting on her private ("I believe we ought") judgment about justice to be ruled by common law. Thus, like Kant, Locke's answer to Question 1 above stresses the moral disorder and injustice produced by each unilaterally acting on her private judgment—this is the importance of the model of the state of nature, showing why all sensible agents would be driven to seek reconciliation. On Locke's view:

[A]ll private judgment of every particular Member being excluded, the Community comes to be Umpire, by settled standing Rules, indifferent, and the same to all Parties; and by Men having Authority from the Community, for the execution of those Rules, decides all the differences that may happen between any Members of that Society concerning any matter of right .....<sup>60</sup>

Locke is sensitive to the limits of reconciliation; these common rules of justice must be within the bounds of reasonable disagreement; each must see the laws as sufficiently just to merit endorsement.<sup>61</sup> Should those legislating and enforcing the common rules overstep those bounds, individuals are justified in employing their private judgment and rebelling. Specifying this limit can only be internal to

<sup>59.</sup> See Gaus, supra note 51 (exploring the idea of the gap).

<sup>60.</sup> JOHN LOCKE, Second Treatise of Government, in Two Treatises of Government § 87, at 342 (Peter Laslett ed., Cambridge Univ. Press 1960) (1690).

<sup>61.</sup> In contemporary political philosophy this is typically understood as an aspect of a legitimacy—specifying when a law is "too gravely unjust." JOHN RAWLS, *Reply to Habermas*, *in* POLITICAL LIBERALISM, *supra* note 3, at 428.

a perspective (each makes his own appeal to heaven), but Locke is clearly confident that only if most individuals believe this limit is surpassed will the common system of rules be undermined. <sup>62</sup>

On this route to reconciliation, the description of the disorder of the state of nature is meant to show why sensible moral agents seek reconciliation within some bounds of reasonable disputes about justice. An alternative route is to begin by identifying a population of agents who have answered our two questions in "reasonable" ways. It is not uncommon to understand Rawls's original position as a sort of "primordial" state of nature like baseline, 63 but Rawls is clear in rejecting this—the no agreement point in justice as fairness is generalized egoism, not the state of nature. 64 Now an egoism specification of the baseline is appropriate if justice is purely dependent on joint action, for then "no agreement" would entail "no justice" and the result would be simply generalized self-interest. But once we have distinguished "I believe we ought implies I ought" reasoning from reconciliation, we see that the default need not be egoism. In the Reconciliation Game of Figure 2, the default is the  $(r_1, r_2)$  outcome, in which Alf and Betty each acts on his or her preferred rule. 65 For those who believe that justice is purely social in the way we have examined, this default could be equivalent to egoism (no justice), while to others it might represent the inherent justice of their personal action on their "I believe we ought" judgments.

Now if we understand the baseline as a no coordination point (leaving behind whether this means no justice at all or the minimal justice of unilateral action), the contractual analysis will be sensitive to how much each party gains from coordination. If we had individuals who gained little from it (think of the Go Your Own Way Game), they will have little incentive to reconcile. Each may give the others an ultimatum, and all end up walking away. All contractual analyses require some account of the strong tendency to reconcile—to sign the contract. Rather than deriving the incentive to reconcile from an analysis of the state of nature, this version of the social contract assumes that the parties have a strong moral interest in reconciliation on common rules. Thus, Rawls restricts the parties to those who are "ready to propose principles and standards of fair terms of cooperation and to abide by them willingly, given the assurance that others likewise will do so." This supposition entails that all are playing a version of the Reconciliation Game: each strictly prefers some *coordination* on fair common

<sup>62.</sup> See also Gaus, supra note 49.

<sup>63.</sup> AMARTYA SEN, THE IDEA OF JUSTICE 10 (2009).

<sup>64.</sup> RAWLS, supra note 29, at 127.

<sup>65.</sup> The language of preference is, unfortunately, usually a red flag to moral philosophers. It is important to always keep in mind that a preference is simply a binary relation according to which one state of affairs or action is ranked as superior to another; it is not a reason or explanation as to why it is so ranked. To say that Alf holds that " $\alpha$  is preferred to  $\beta$ " because that "is his preference" is a tautology, not an explanation. A utility function is a mathematical representation of a consistent preference structure. As Rawls recognized, even deontological theories such W.D. Ross's can be faithfully represented in terms of standard cardinal utility measures. RAWLS, *supra* note 3, at 332 n.42. 66. *Id.* at 49.

rules to going it alone. Other assumptions, such as the concern of each for their basic interests in pursuing a plan of life and the strains of commitment, ensure that not every possible coordination point is preferred to no agreement (some reconciliations may demand too much),<sup>67</sup> so the parties are truly looking for a way to reconcile that improves (given their moral perspectives, I would say) on the no agreement point.

We, thus, have a different pair of answers to Q1 and Q2 than Locke's. To Q1, each has a strong interest in securing just common rules on which we coordinate; people who are inclined to play Go Your Own Way simply are not parties to the agreement. And to Q2, justice as fairness answers that each is willing to accept rules that improve on their no agreement point. Rawlsian-inspired theories have different outcomes once they start varying their answers to these questions. As I read him, Jonathan Quong answers Q2 very differently (at least than Rawls did in *Theory*) indicating that the parties' acceptable gap between their preferred conception and the reconciliation point is restricted by robust liberal commitments.<sup>68</sup> Their no agreement point would be not general egoism, but a non-liberal outcome.

# D. Must We Commence by Normalizing? The Self-Organization Insight

My main point in briefly sketching these two social contract approaches is to highlight how, since the seventeenth century, liberal political philosophy has endeavored to show that moral diversity does not imply moral disorder. Coordination on moral rules need not be based on full moral homogeneity. Here an acquaintance with elementary game theory helps a good deal; coordination and diversity are by no means incompatible. Indeed, at the heart of the division of labor is the insight that coordination often is valuable simply *because* we are so diverse. Given that, in addition, moral diversity can improve the moral perspectives of everyone; there is nothing at all incoherent about wishing for a society with an array of diverse moral perspectives.

This is not to say that the social contract—or indeed, any—approach accommodates unlimited diversity. "A normalization of interests attributed to the

<sup>67.</sup> RAWLS, *supra* note 29, at 126.

<sup>68.</sup> Thus Quong presents his account as a justification internal to liberalism, aimed at liberals. *See* JONATHAN QUONG, LIBERALISM WITHOUT PERFECTION 12–44, 137–91 (2011). There are of course problems here in relating the central place of the contract in A Theory of Justice to the more peripheral role it (and justice as fairness) occupies in Political Liberalism. I set aside these issues here. On these complex matters, see the fine work of Paul Weithman. PAUL WEITHMAN, WHY POLITICAL LIBERALISM? (2010); *see also* SAMUEL FREEMAN, JUSTICE AND THE SOCIAL CONTRACT 215–58 (2007); Gerald Gaus, *The Turn to a Political Liberalism, in* THE BLACKWELL COMPANION TO RAWLS 235–50 (David Reidy & Jon Mandle eds., 2014).

<sup>69.</sup> For an application of this insight to moral diversity, see Ryan Muldoon, Michael Borgida & Michael Cuffaro, *The Conditions of Tolerance*, 11 POL., PHIL. & ECON. 322 (2011).

<sup>70.</sup> See supra Sections II.C, III.C.

<sup>71.</sup> See supra Introduction.

parties," Rawls observes, is "common to social contract doctrines." As we have seen, contract theories assume some level of interest in reconciliation (e.g., all are devoted to finding fair terms of cooperation) and some assumption of a state of nature or nonagreement baseline, which identifies a common view of a minimally acceptable agreement. Although such assumptions render the contractual project tractable, they limit at the outset of the analysis the degree of diversity to be accommodated. The very beginning of the analysis identifies some group G, that disagrees on matter M, but has a shared interest L in reconciliation, given outcomes that improve on a baseline B. Every contract normalizes these four variables by specifying the range of acceptable values, and in so doing limits at the outset the moral diversity to be accommodated. Not only must it exclude some from the justificatory community from the get-go, but it must assume away critical sources of diversity. The social contract theorist insists that because our "I believe we ought" reasoning leads us to disagree about the demands of morality and justice (M), we need to reconcile with others (L); yet the disagreement in individual moral reasoning (M) leads us to disagree on the specification of the Lvalues as well: to what extent should we reconcile with others? Having reasonably accepted that we disagree in our first-level moral judgments, the contractualist seeks to resolve this problem through a philosophical procedure that supposes reasonable people do not have deep reasonable disagreements about the morally desirable degree of reconciliation. In this sense it supposes a normalized interest in reconciliation, and so avoids, rather than responds to, a fundamental challenge of moral diversity.

In various works I have sought to relax this normalization, considering whether the contractual approach can be supplemented by one focusing on self-organization. The point of the idea of an *eligible set* in *The Order of Public Reason* is to allow each moral agent to identify, given her own perspective, both the set of rules on which she has sufficient reasons to reconcile, and her own baseline, i.e., rules that are ineligible as a shared rule of justice on her perspective. Each moral agent thus identifies a set of rules on which, given her moral perspective, she has moral reason to reconcile (and she orders the acceptability of these rules in light of her moral perspective). A person's eligible set indicates when she is willing to play the Reconciliation Game. She then searches for others with whom she can play the Reconciliation Game in a way that achieves her preferred moral outcomes. The critical point is that, instead of these decisions being made by the moral or political philosopher at the level of initial theory specification, the theory seeks to include the decisions as elements of each person's moral perspective. I see this as a fundamental shift in the concept of a moral theory, placing

<sup>72.</sup> JOHN RAWLS, LECTURES ON THE HISTORY OF POLITICAL PHILOSOPHY 226 (Samuel Freeman ed., 2007). See generally Gerald Gaus, Is Public Reason a Normalization Project? Deep Diversity and the Open Society, 33 Soc. Phil. Today 27 (2017).

<sup>73.</sup> GAUS, *supra* note 43, at 303.

<sup>74.</sup> This is also a feature of MULDOON, *supra* note 7. For an application to a specific category of disagreement, see KEVIN VALLIER, LIBERAL POLITICS AND PUBLIC FAITH (2014).

individual moral perspectives more firmly at the very heart of the analysis.<sup>75</sup> In more recent work, I have tried to understand some of the dynamics of self-organized convergence among those who disagree on both their "I believe we ought" judgments of justice and the extent to which (on their perspective) justice provides reasons to seek reconciliation.<sup>76</sup> Under what conditions does a diverse group of moral agents converge on a common rule, and when are their differences so deep that they form allegiances to different moral rules and networks? On this approach, we seek to discover what types of moral diversity are consistent with moral coordination, rather than the philosopher specifying it at the outset. Interestingly (to me, at any rate), this analysis provides some initial grounds for supposing that under a surprising array of conditions, agents with diverse sometimes even polarized—moral views can organize themselves under common rules.<sup>77</sup> And, most interestingly, sometimes more diverse populations may have a stronger tendency to morally coordinate than less diverse populations. An uptake of this idea would constitute a fundamental change in the orientation of the public reason project, which has thus far supposed that diversity is the problem, and commonality the sole route to sharing. So far from heterogeneity always being an impediment to convergence on a shared rule of justice, some configurations of diversity, I have tried to show, can help secure agreement. We may have made a fundamental error in asking "do we agree enough to live together?" We should, perhaps, be inquiring whether the overall pattern of homogeneity and heterogeneity induces coordination on common ways of living together.

Still, deep moral polarization certainly blocks reconciliation. Everyone has their limits, and in our increasingly deeply polarized societies these may thwart the reconciliation of many on some matters. The focus of the social contract on reconciliation in a unitary national state is unfortunate, for this is precisely the arena that requires, as Milton and Rose Friedman put it, "conformity without unanimity;" a single answer is necessary regardless of dissension. The majority is always tempted to play an unfortunate version of "Go Your Own Way" in which the minority is not allowed to go *its* own way, i.e., all must play "We Go My Way." In a highly morally diverse society, when political decision-making pushes beyond maintenance of basic rights and liberties to the legal codification

<sup>75.</sup> For some reflections on what this means for moral method, see Gerald Gaus, *Social Morality and the Primacy of Individual Perspectives*, 30 REV. AUSTRIAN ECON. 377 (2017).

<sup>76.</sup> See Gerald Gaus, Self-Organizing Moral Systems, 17 POL., PHIL. & ECON. 119 (2018). I certainly do not wish to give the impression that I am alone in exploring this idea. See also Ryan Muldoon, Exploring Tradeoffs in Accommodating Moral Diversity, 174 PHIL. STUD. 1871 (2017).

<sup>77.</sup> The most basic reason for this is that reconciliation on a moral rule manifests an increasing returns dynamic. The more others adopt a rule, the greater its reconciliation benefits. This induces cascades to widely shared rules, often eventually joined by those who rather strongly prefer another rule and who do not greatly value reconciliation. High levels of diversity tend to encourage cascades that are not interrupted and so end in fixation on one rule. *See* Gaus, *supra* note 7.

<sup>78.</sup> See D'Agostino, supra note 7.

<sup>79.</sup> MILTON & ROSE FRIEDMAN, FREE TO CHOOSE 66 (1980).

of deeply controversial conceptions of justice, hostility and contempt for the law is apt to be triggered.<sup>80</sup> Politics is ill-equipped to cope with such deep, polarized, moral disagreement. Each faction, hopeful that a majority win in the next election will allow it to institute "true justice," simply sets the stage for the next iteration of "Now We Go *My* Way!" aggravating mistrust and, in the end, inducing hatred.

Although we are understandably obsessed by the hatred underlying so much American politics, we should not forget that Democrats and Republicans share a myriad of rules about bodily integrity, property, gender equality (yes, though they disagree on policies to pursue it). They cooperate in neighborhood organizations (my own neighborhood, for example, has about an equal distribution of hybrids and pickups, yet remains an active neighborhood organization). The more our moral rules track networks of individuals seeking to live together to solve their common social problems, the greater the prospects for reconciliation. As Elinor Ostrom has taught us, self-organizing rule networks are most apt to arise when they correspond to individuals sharing common problems that require cooperative solutions. The idea of a polycentric moral order—in which some fundamental rules are shared by all, but other rules are restricted to sub-networks—helps us to see our way to free reconciliation in a vibrant moral order. 82

# E. Avoiding Moral Monoculture

Notice that the Reconciliation Game combines equilibrium with moral disagreement: both  $(r_1, r_1)$  and  $(r_2, r_2)$  are possible equilibrium solutions, yet both manifest continuing disagreement. In the strong sense of the idea, a society based on either would not be what Rawls called "well-ordered." Although in equilibrium Alf and Betty accept the same rules of justice, they disagree about the justice of those rules. Most moral and political philosophers would not see this as a happy result. Moral disagreement continues, so full confidence in the justice of our fellows is lacking. Further, although in a simple (two strategy) game either rule is an equilibrium result, if we add additional strategies (such as Betty seeking to covert others to  $r_2$ , even when they are now playing  $(r_1, r_1)$ ), the result may not

<sup>80.</sup> See Gerald Gaus, The Open Society and Its Friends: With Friends Like These, Who Needs Enemies?, CRITIQUE 21 (Jan. 10, 2017), http://www.gaus.biz/OpenSocietyAndFriends.pdf [https://perma.cc/XR8Y-EYVT]; Gerald Gaus, The Priority of Social Morality, in Morality, Governance, and Social Institutions 23 (Thomas Christiano et al. eds., 2018); see also Paul H. Robinson, Why Does the Criminal Law Care What the Layperson Thinks Is Just? Coercive Versus Normative Crime Control, 86 Va. L. Rev 1839 (2000); William J. Stuntz, Self-Defeating Crimes, 86 Va. L. Rev 1871 (2000); Gerry Mackie, Effective Rule of Law Requires Construction of a Social Norm of Legal Obedience, in Cultural Agents Reloaded (Carlo Tognato ed., 2018).

<sup>81.</sup> See Elinor Ostrom, Governing the Commons (1990).

<sup>82.</sup> On polycentrism, see Elinor Ostrom, *An Agenda for the Study of Institutions*, *in* Choice, Rules and Collective Action 97 (Fillippo Sabetti & Paul Dragos Aligica eds., 2014); Vincent Ostrom, *Polycentricity (Part 2)*, *in* Polycentricity and Local Public Economies 119 (Michael D. McGinnis ed., 1999); Paul Dragos Aligica, Institutional Diversity and Political Economy (2014).

<sup>83.</sup> RAWLS, supra note 29, at 397–98.

<sup>84.</sup> *See, e.g.*, David Estlund, *The Truth in Political Liberalism, in* TRUTH AND DEMOCRATIC POLITICS 252, 262–71 (Andrew Norris & Jeremy Elkins eds., 2012).

seem dynamically stable. And, if nothing else, the current public reason literature is nearly obsessed with showing how the stability of a just society can be threatened and, with a great deal of work, apparently secured.<sup>85</sup> To many, it is manifest that our ultimate goal should be a society in which it is public knowledge that all agree on the best conception of justice, and that our current rules best satisfy this conception.<sup>86</sup>

This, though, is not so if we accept:

The Relevance of Environment: That moral rule r is part of the best conception of justice for society S at t partly depends on the overall social and environmental conditions characterizing S at t.

These environmental factors include population density, cultural norms, technological factors, forms of economic cooperation, common social categories (do some categorize others by race and ethnicity?), forms of family organization, and so on. If a significant subset of these are relevant to the claim that r is best for S at t, then even if r is indeed the best or optimal rule for S at t it would be unfortunate for all in S to take r as the best and drop allegiance to competing rules. For this would make S a moral monoculture in relation to r, but as we know monocultures are fragile. They can do wonderfully in some environments, but collapse in others. In contrast, diverse systems have less variance in their performance given environmental change.  $^{87}$ 

Moral diversity functions in many ways like biodiversity. When the environment changes, in a diverse system some elements that did well under previous conditions become less functional, while other elements, which may have been less well adapted to the previous system, now are ready to be exploited and assume a more important place given the new conditions. In a world without effective contraception and antibiotics, moral rules against pre- and extra martial sex may have promoted a host of morally important goals, albeit at some cost to human freedom. That dissidents, holding different conceptions of justice, placing more weight on freedom, argued for greater sexual freedom in the nineteenth century meant that these views were already represented and defended, so that morality could quickly adjust to environmental conditions, such as advances in medicine and greater economic opportunities for women. Societies that had a greater moral monoculture on this issue—perhaps some Catholic societies—had

<sup>85.</sup> This arose from John Rawls, *The Idea of an Overlapping Consensus*, *in* POLITICAL LIBERALISM, *supra* note 3, at 133, and was greatly spurred by WEITHMAN, *supra* note 68. Given the strong conformity bias of humans, moral stability is, I think, better seen as the default rather than a hard-to-achieve result. On the strong influence of conformity to the present set of rules, see PETER J. RICHERSON & ROBERT BOYD, NOT BY GENES ALONE 120–24, 162–63 (2005); NATALIE & JOSEPH HENRICH, WHY HUMANS COOPERATE 11–13, 22–30 (2007).

<sup>86.</sup> See the very demanding conditions for "full publicity" in POLITICAL LIBERALISM, *supra* note 3, at 66–71. A well-ordered society is said to satisfy them.

<sup>87.</sup> See PAGE, supra note 21, 167–195; cf. F.A. HAYEK, Notes on the Evolution of Systems of Rules of Conduct, in THE MARKET AND OTHER ORDERS 282 ("A change of environment may require, if the whole is to persist, a change in the order of the group, and therefore in the rules of conduct of individuals.").

a significantly greater difficulty in adjusting to the new environment, experiencing high transition costs (for example, higher rates of untreated sexually-transmitted diseases and so unnecessary deaths and social disruption).

As Hayek noted, "we are as little able to conceive what civilization will be, or can be, five hundred or even fifty years hence as our medieval forefathers or even our grandparents were able to foresee our manner of life today." Because of this continuing moral disagreement is by no means regrettable. It spurs moral discussion, learning and adjustment to a constantly changing, and almost always surprising, world. This also points to how diversity is distinct from simple disagreement, for a diverse system has a wide range of views: views are not simply different, but far apart (variance is high on many issues), providing the moral resources for the next era of our society, whatever that may be. Lots of small differences do not for diversity make.

#### V. MORAL DIVERSITY AND MORAL COMPLEXITY

# A. The Impossibility of Contractual Choice Under High Diversity: Evaluating Single Rules

We have seen, then, (1) that moral diversity does not entail moral disorder. Social contract theory provides at least two routes from moral diversity to moral coordination—the state of nature and original position set-ups. (2) Although the social contract is the most developed philosophical device for generating moral coordination in the face of moral diversity, it does so through putting constraints—normalizing assumptions—on admissible diversity. The social contract, then, is a limited moral method for securing reconciliation in the midst of diversity. (3) I have sketched an alternative in which each moral agent identifies a ranked set of rules on which she can reconcile (i.e., her perspective's eligible set) to secure justice. She then searches for others seeking justice-through-reconciliation, playing reconciliation-type games with them. The appropriate method here is not a collective agreement a la the social contract but agent-based modelling of agents' diverse moral choices and the conditions under which coordination on common moral rules will occur. The advantage of this unorthodox approach is that the theorist does not, at the outset of analysis, identify the range of diversity consistent with a moral order that can be endorsed by all.

This might seem wrong: philosophers who take moral disagreement most seriously usually invoke the social contract.<sup>91</sup> Alas, the social contract model

<sup>88.</sup> F.A. Hayek, The Constitution of Liberty 23–24 (1960).

<sup>89.</sup> See also GAUS, supra note 8, 150–240; Gerald Gaus, The Role of Conservatism in Securing and Maintaining Just Moral Constitutions: Toward a Theory of Complex Normative Systems, in AMERICAN CONSERVATISM 246 (Sanford V. Levinson et al. eds., 2016).

<sup>90.</sup> Thus, diversity can be measured in terms of the degree of variation. *See PAGE*, *supra* note 21, 79–126; Martin L. Weitzman, *On Diversity*, 107 Q.J. ECON. 363 (1992).

<sup>91.</sup> This includes my own work.  $See\ generally\ Gaus,\ supra\$ note 43; Michael Moehler, Minimal Morality: A Multilevel Social Contract Theory (2018); Muldoon,  $supra\$ note 7.

crumbles under the burdens of great diversity. To see why, suppose the task of the contract is to take as inputs a large array of diverse and sensible perspectives  $\{P_A \dots P_N\}$ , consider alternative sets of rules (institutions)<sup>92</sup>  $\{R_X\}$ ,  $\{R_Y\}$  etc., and find which satisfies some endorsement test of  $\{P_A \dots P_N\}$ . Which, from this collective perspective, are the best terms of reconciliation, i.e., satisfies every perspective's understanding of justice in an acceptable way? In more familiar terms, the contractors evaluate the justice of different basic structures. Consider  $P_B$ , the perspective of contractor Betty. She asks herself, "how well does set of rules  $\{R_X\}$  satisfy the demands of my perspective?" This looks like, perhaps, a tractable question, examining the fit between the content of  $\{R_X\}$  and her perspective,  $P_B$  (perhaps a Kantian one). But her concern is rather more involved; she must want to know, given the population that will be living under  $\{R_X\}$ , how just that society (social world) would be. To determine this she needs to consider, given the large set of perspectives  $\{P_A \dots P_N\}$  held by other agents, the justice of a social order regulated by  $\{R_X\}$ .

Take what seems to be the easiest case: Betty has disaggregated the set  $\{R_X\}$ into its constituent rules  $r_1, r_2, r_3, \ldots$ , and evaluates them one-by-one. So she is merely evaluating the justice of  $r_1$  given her perspective, but in a highly morally diverse population. Applying Rawls's four-step CI procedure, 93 she asks herself whether she can will that  $r_1$  be a law of nature in her social world, given her perspective. Now the moral upshot of this rule will depend on not simply the degree of conformity to the rule's deontic imperatives but on how those with other moral perspectives react to the rule and the morally-relevant options they take. 94 Rules, after all, seldom mandate specific actions; they generally permit or prohibit actions, which leaves even perfectly-complying agents with a large degree of freedom as to what specific act they will perform. 95 Within this sphere, people are free to draw on their diverse perspectives in deciding how to act, perhaps in fidelity to their personal moral ideals or judgments of virtue. Evaluation in terms of common social morality or justice does not exhaust most people's moral perspectives (feature VI). So, if  $r_1$  says "one may abort in the first trimester," the rule itself does not tell Betty what people will do in response, even with the "idealized" assumption of universal compliance. She needs to run her predictive model to see what sort of world would result. Some may abort, approve of it, and encourage others to abort; some may abort with moral uncertainty or deep regret; others may never think of having an abortion (and so comply) but, after observing some of the ill-effects of the permission (and most rules have some ill-effects), may come to disapprove of those who abort,

<sup>92.</sup> In Elinor Ostrom's analysis, institutional arrangements are composites of rules. *See* Larry L. Kiser & Elinor Ostrom, *The Three Worlds of Action*, *in* POLYCENTRIC GAMES AND INSTITUTIONS 56 (Michael D. McGinnis ed., 2000).

<sup>93.</sup> See supra Section III.A.

<sup>94.</sup> Recall that what options are relevant is itself part of a moral perspective.

<sup>95.</sup> See generally Gerald Gaus & Shaun Nichols, Moral Learning in the Open Society: The Theory and Practice of Natural Liberty, 34 Soc. Phil. & Pol.'y 79 (2016).

even while allowing their right to. <sup>96</sup> This last group may come to see those who have an abortion as morally flawed (say vicious) and so move some measure from reconciliation to conflict with them on other issues, leading to increased moral disorder. <sup>97</sup> All this is part of the social world produced by a rule allowing abortions, and there is no possibility that Betty could reliably predict the results when the rule is being proposed in the contractual setting.

This is even more obvious with prohibitory rules, perfect compliance with which can bring about radically different results. 98 Consider a moral rule that prohibits religious arguments in political deliberations about basic justice. 99 Suppose that societies  $S_1$ ,  $S_2$  and  $S_3$  all fully comply with the rule. In  $S_1$ , many are religious, and, while they comply, their moral perspectives lead them to retreat from the public sphere, where they cannot appeal to what they consider the fundamental basis of their convictions, leaving political matters to their secular brethren. In  $S_2$ , religious people tend to have a much stronger devotion to civic engagement and so participate actively in political debate while complying (though perhaps with some misgivings) with this duty. In  $S_3$ , the secular citizens, interpreting this moral duty as confirming their conviction that religious arguments are bogus and are unworthy of admittance into public debate (almost all of their scientific arguments are admissible, after all), become even more dismissive of religious comprehensive doctrines. If all three societies perfectly comply, the emerging moral relations between citizens are vastly different. Imagine the multitudinous combinations of simply these three moral responses and the different moral orders that might result from the diversity of perspectives regarding this single moral rule. 100 Such systems are characterized by complex feedback relations; each agent's reactions to the last interaction become inputs for the next. 101 Attempts to mathematically model such diverse multiple feedback systems quickly become incalculable.

<sup>96.</sup> There is a reasonable conjecture that this occurred in the case of abortion. See Gaus, supra note 77, at 2.

<sup>97.</sup> See supra Section IV.A.

<sup>98.</sup> This is a central claim of Gaus & Nichols, supra note 95.

<sup>99.</sup> Rawls, with a rather complex proviso, endorses this as a moral duty. *See* JOHN RAWLS, *Public Reason Revisited, in Political Liberalism, supra* note 3, at 440–90.

<sup>100.</sup> Many working in the broadly Rawlsian tradition maintain that the moral duty of civility promotes civic trust and assurance. Although I admire their theoretical sophistication, those who seek to formally model the dynamics of assurance games based on this duty miss the crucial point—there is no good reason to think that assurance is the relevant emergent property: The same moral duty could easily breed contempt for, or the passivity of, the religious. Only by strongly normalizing the relevant perspectives can we accurately predict the effects of the duty of civility.

<sup>101.</sup> See Brian Arthur, Complexity Economics, in ComplexITY and the Economy 1, 2 (2014) ("Complexity... asks how individual behaviors might react to the pattern they together create, and how that pattern would alter itself as a result."); F.A. HAYEK, The Theory of Complex Phenomena, in STUDIES IN PHILOSOPHY POLITICS, AND ECONOMICS 22 (1967); Paul Lewis, Purposeful Behaviour, Expectations, and the Mirage of Social Justice: The Influence of Cybernetics on the Thought of F.A. Hayek (prepared for the History of Economics Society meeting, Durham N.C, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2790169 [https://perma.cc/B2HM-4VSM]; JOHN H. MILLER & SCOTT E. PAGE, COMPLEX ADAPTIVE SYSTEMS 50–53 (2007).

# B. The Impossibility of Contractual Choice Under High Diversity: Institutions

If the rules in the set  $\{R_X\}$  displayed no interactions, Betty's disaggregation procedure would seem feasible, i.e., if rule  $r_1$  secured moral worth of degree a and  $r_2$  of degree b, where the overall moral evaluation of both was simply a+b. Betty could then evaluate the justice of each rule and aggregate her results. However, the assumption of the independence of each rule's justice is implausible; systems of rules and institutions display interactions.  $^{102}$  A rule that invokes heavy penalties for stealing may have very different implications for justice or social morality if there is also a rule that requires assistance to those in need or when the rules of property are vague. This is not a philosophical conjecture. In their extensive fieldwork on actual institutions, Elinor and Vincent Ostrom stressed that institutions are composed of numerous rule configurations. The constituent rules have strong interdependencies, both with each other and with environmental conditions. "A change in any one of these variables produces a different action situation and may lead to very different outcomes."  $^{103}$ 

We need not assume a maximal interconnectedness of each rule with all others. Clusters of rules will form systems reasonably independent of the rest of the set. 104 But identifying such clusters will itself be a matter of discovery for Betty. This is not to say that she cannot make tentative judgments on the justice of any specific rule (we all clearly do), but these really must be tentative. She must constantly investigate which rules are interdependent and which are relatively independent in relation to each other. This is not a formal part of the rule; its interactions with other rules are often unexpected and can change as circumstances vary, so she must be constantly re-running her predictive model(s). We could not have anticipated, for example, that, in response to a law prohibiting the consumption and sale of alcohol, many people, conjoined with certain policing rules and practices, become much more skeptical of legal regulation and the police and less suspicious of organized crime. 105 Betty thus must engage in an ongoing iterative process: observing a rule, evaluating the justice of the resulting social world but trying to see whether this justice was linked to other rules, seeing how modifying them affects the justice of the resulting social world, and so on. Because perspectives are diverse, they will not all reach the same conclusions about what rules are interconnected, so even in principle that cannot be part of the shared contractual set-up. If there is a contract here, it is a highly unusual one, in which each individual is constantly changing her views about the justice of social rules

<sup>102.</sup> F.A. HAYEK, *Notes on the Evolution of Systems of Rules of Conduct* (1967), *reprinted in* THE MARKET AND OTHER ORDERS 278, 282–83 (Bruce Caldwell ed., 2014).

<sup>103.</sup> OSTROM, *supra* note 81, at 111.

<sup>104.</sup> The issue here is the extent to which rule systems are decomposable. *See generally* HERBERT SIMON, THE SCIENCE OF THE ARTIFICIAL 51–84 (3d ed. 1996); Fred D'Agostino, *From the Organization to the Division of Cognitive Labor*, 8 POL., PHIL. & ECON. 101 (2009).

<sup>105.</sup> See supra note 80.

in response to other people changing their views. <sup>106</sup> Indeed, this is precisely the self-organizing picture <sup>107</sup> in which individuals are constantly searching for reconciliation to better understand what rules serve their moral ends.

#### C. How Emergence Undermines Traditional Political Philosophy

As Ruth Lane observes, on the dynamic we have been exploring, "every agent is constantly reacting to its neighbors; this eliminates any reference to an outside governor; and the reaction is in terms of *basic rules* ...." Once we have arrived at this juncture, our moral system—whether or not it is described in the language of contracts—is self-organizing and gives rise to the overall moral order as an emergent property of countless diverse individuals responding to each other's moral decisions. Having built in widespread diversity, considerable interconnectedness, and individual moral choices according to rules, the moral system is, in the technical sense, complex. 109

Hayek was one of the first to recognize that, under these conditions of complexity, the overall moral order is an emergent property of the system of rules employed by diverse agents. Emergent properties are sometimes distinguished from mere "resultant" properties on the grounds that, while a resultant property is the expected consequence of an underlying set of properties, emergent properties are very often novel and unexpected. In perhaps the earliest analysis of such systems, John Stuart Mill considered a system, say, S, composed of elements (e.g., rules)  $\{r_1 \dots r_n\}$  and an overall resulting order O. Mill proposes three features of property O:

- (1) O is not the sum of  $\{r_1 \dots r_n\}$ ;
- (2) O is of an entirely different character than  $\{r_1 \dots r_n\}$ ;
- (3) O cannot not be predicted or deduced from the behavior of the members of  $\{r_1 \dots r_n\}$  considered independently (i.e., apart from their interactions in S).

<sup>106.</sup> This is critical to Muldoon's iterative social contract. See MULDOON, supra note 7, 115–24.

<sup>107.</sup> See supra Section IV.D.

<sup>108.</sup> RUTH LANE, THE COMPLEXITY OF SELF GOVERNMENT 10 (2017). We can distinguish two sorts of rules: those of shared social morality (my concern) and individual rules, expressing one's overall moral perspective. An agent's action then can be formally modeled as produced by a rule hierarchy, in which she generally follows the moral rules and then invokes her personal rules.

<sup>109.</sup> See MELANIE MITCHELL, COMPLEXITY 12 (2009). Mitchell's book is an excellent introduction to complexity. For helpful accounts, see also PAGE, *supra* note 21; JOHN H. HOLLAND, COMPLEXITY (2014). For analyses stressing the relation between complexity and agent-based models, see ROBERT AXELROD, THE COMPLEXITY OF COOPERATION (1997); MILLER & PAGE, *supra* note 101.

<sup>110.</sup> See, e.g., HAYEK, supra note 101; F.A. HAYEK, Notes on the Evolution of Systems of Rules of Conduct, in Studies in Philosophy, Politics, and Economics, supra note 101, at 66. See also, Gerald Gaus, Hayekian "Classical" Liberalism, in Routledge Handbook of Libertarianism 34 (Jason Brennan, Bas van der Vossen, and David Schmidtz eds., 2018).

<sup>111.</sup> John Stuart Mill, *A System of Logic*, in 7 The Collected Works of John Stuart Mill 1, 370–73, 438–40 (John M. Robson ed., 2006). For a helpful analysis, see Sunny Y. Auyang, Foundations of Complex-Systems Theories § 22 (1998).

Later analyses of complexity, such as Hayek's, add that given the novel O's that may arise under the same underlying set of rules, we can, at best, only predict general patterns that may characterize the emerging orders, not their specific features.  $^{112}$ 

Since Plato political philosophy has assumed that justice is simply a resultant property of a set of institutions, a critical task is to specify the institutions of a society that yield a just moral order. In this vein Rawls examines five politico-economic systems: "(a) laissez-faire capitalism [the classical system]; 113 (b) welfare-state capitalism; (c) state socialism with a command economy; (d) property-owning democracy; (e) liberal (democratic) [market] socialism."114 Rawls, and many of his followers (as well as critics), insist that useful judgments of the overall justice of such systems can be made, clearly treating overall justice as resultant property of the sets of institutions. "Here is the set of rules,  $\{R\}$ , and here is the system of social relations S that will result—let us evaluate its justice." The assumption is that the relation of these institutions to overall justice is essentially linear: we can predict in a relatively confident way that, say, property owning democracy will be more just than welfare-state capitalism. But when we talk about social states such as a "property-owning democracy" we are referring in a loose way to a myriad of interconnected rules and behavioral tendencies that constitute the working of the set of institutions that are summed up by this moniker, and under conditions of extensive moral diversity these have the characteristics of a complex system. The overall justice of the same set of institutions could vary immensely, even under the assumption of full compliance. Moreover, given the interconnections between the functioning of the institutions, we cannot suppose that the closer we get to the ideal institutions of property-owning democracy the more just our society will be. Given complexity, it is easily the case that even if the ideal version of property-owning democracy is exceptionally just, getting very close to that social state (say  $\{R^*\}$ , which differs from the ideal  $\{R\}$ in only one rule) may have an overall justice that is far from  $\{R\}$ ; many welfarestate capitalisms could be more just that  $\{R^*\}$ . This is not simply "an intuition" that confident supporters of property-owning democracy can reject on the basis "commonsense" reflection. 116 Given the conditions we have articulated, complexity, nonlinearity, and emergence analytically follow, and so the justice of institutions cannot be a resultant property.

<sup>112.</sup> HAYEK, supra note 102.

<sup>113. &</sup>quot;Laissez-faire" is a misnomer; as Rawls describes this system, it includes a "rather low social minimum." RAWLS, *supra* note 53, at 137. His description suggests the classical system in political economy, which was most definitely not a laissez-faire system—laissez-faire was characteristic of the Manchester School and French Physiocrats. It is unfortunate that, despite the efforts of historians of political economy, this confusion is still common. *See* LIONEL ROBBINS, THE THEORY OF ECONOMIC POLICY IN ENGLISH CLASSICAL POLITICAL ECONOMY 36–49 (1952).

<sup>114.</sup> RAWLS, supra note 53, at 136.

<sup>115.</sup> See Gaus, supra note 8, at 61–74 (providing an analysis of how this occurs).

<sup>116.</sup> As, I think, do Neufeld and Watson. *See* Blain Neufeld & Lori Watson, *The Tyranny—or the Democracy—of the Ideal?* 5 COSMOS + TAXIS 47 (2018).

The problem this poses for social contract theory can be understood in two ways. (1) Our contractors cannot accurately evaluate the overall justice of a set of institutions  $\{R\}$ ; by their very nature these complex systems have multiple equilibria, and can settle into very different states in unpredictable ways. The often-accepted assumption that we can, with anything even remotely resembling accuracy, predict the overall justice of hypothetical institutions in undefined hypothetical circumstances operated by highly heterogeneous actors is an illusion. With basic knowledge of the system dynamics we can make some judgments: systems founded on some rules will be dysfunctional. But we cannot make useful judgments of the justice of resulting social worlds. (2) Nor can we usefully work the other way around: picturing the overall justice that we would like to achieve and devising the institutions that yield it. Emergent properties and their underlying rule structures are related by many-to-many mappings. The same rule structure can give rise to different emergent properties, and the same emergent property can be realized by multiple rule structures.  $^{117}$ 

# VI. COMPLEX MORAL DIVERSITY AND THE TASKS OF SOCIAL PHILOSOPHY

Unless diversity is severely constrained, the social contract cannot identify the best rules of justice; and even if it could identify a common vision of the just society, it cannot identify the institutional scheme that would secure it. It is worth stressing that this conclusion arises from grappling with extensive moral diversity. If a theorist is willing to normalize enough, the modeled agents will be sufficiently homogenous in their anticipated justice-relevant choices that parties to the agreement can develop an institutional plan for the just society. Or if a philosopher is, as it were, willing to max out on normalization, she can simply defend one perspective as the correct one, and theorize on the assumption that everyone shares this perspective. 118 But these familiar approaches to social and political theorizing are undermined by the New Diversity Theory, which appreciates not only the numerous sources of sensible moral diversity, but the ways that this diversity helps us solve our shared problems and improve our moral perspectives. Theorizing about morally homogeneous societies is, at best, a quaint remnant of a simpler age, and at worse encourages an authoritarian attitude toward the many who do not share our perspective. 119

It does not follow that New Diversity theory has nothing to say about institutional design. Although the complexity of a diverse moral system precludes institutional blueprints for the just society, or the identification of the overall pattern

<sup>117.</sup> Perhaps with powerful models, systematic experimentation and extensive data, we may be able to reverse engineer complex systems, in the sense of discovering the underlying properties that give rise to a given system. For an examination of the possibility of such reverse engineering in biological systems, see Sara Green, *Can Biological Complexity Be Reverse Engineered?*, 53 STUD. HIST. & PHIL. BIOLOGICAL & BIOMEDICAL SCI. 73 (2015).

<sup>118.</sup> Although in relation to G.A. Cohen's egalitarianism, I argue in *The Commonwealth of Bees*, that even if all share the same egalitarian ethos, reconciliation is necessary. Gaus, *supra* note 51.

<sup>119.</sup> The latter is the theme of *The Order of Public Reason*. GAUS, *supra* note 43.

of just social relations, Hayek insisted that the general principles on which complex systems operate can be discovered and inform our political theorizing. <sup>120</sup> It is sometimes claimed that Hayek's thought is, at bottom, contradictory: he insists on our ignorance of social processes but, out of his analysis of ignorance, he generates prescriptions about what we should do. <sup>121</sup> If we know enough to say why, for example, socialism will not work, then we must have good enough insights into the economic order to intervene to promote social goals. This criticism is misguided. On a complex systems analysis we can know quite a lot about the principles on which complex orders operate, and this theoretical knowledge can allow us to say that some system states cannot be achieved and that some ways of organizing social cooperation are more apt to accommodate coordination by diverse agents than others, while acknowledging that we are unable to control or plan the complex order itself.

In my work, for example, I have defended the following "devices" as structural principles that promote coordination and moral improvement under conditions of extreme moral diversity: 122

- 1. Information and ideas should flow freely, providing opportunities for (1) individuals to interact with those who share their perspective or allied perspectives and (2) with those who have more distant moral perspectives, but who face common problems, so that they can find common ways to tackle common practical problems.
- 2. The substantive normative injunctions of the set of rules {*R*}, whatever it might turn out to be, should be primarily in the form of prohibitions rather than permissions. As Shaun Nichols and I have shown, systems of rules that primarily take the form of prohibitions tend to lead participants to endorse "the principle of natural liberty," a meta-level interpretive principle according to which whatever is not (morally) prohibited is (morally) permitted. <sup>123</sup> If some new act-type is not found on the list of prohibitions, it is permitted; thus, moral experimenters need not first convince themselves that a new action falls under a previous permission before exploring new ways of coordinating and acting morally.
- 3. The set of moral rules  $\{R\}$  should extensively employ "jurisdictional rights" in which each is assigned a social space in which her perspective has authority. Such rights tend to render the system emerging from  $\{R\}$

<sup>120.</sup> This, of course was one of Hayek's main—and often badly misunderstood—themes. See F.A. HAYEK, THE MIRAGE OF SOCIAL JUSTICE passim (1976). It is hard to decide whether our understanding of Hayek's work has been set back more by the resolutely unsympathetic readings of hostile critics, or the banal readings of knee-jerk libertarians.

<sup>121.</sup> GEOFFREY M. HODGSON, ECONOMICS AND EVOLUTION 183 (1993).

<sup>122.</sup> I have greatly benefited from exchanges with Fred D'Agostino about these issues, as well as from reading his insightful essay, *How Can We Do Political Philosophy?*, *supra* note 7. *See also* Gaus, *supra* note 8, at 177–208 (defending the points sketched out here).

<sup>123.</sup> These claims are based on our experimental results with ordinary learners. *See* Gaus & Nichols, *supra* note 95.

less complex by decoupling perspectives: what Alf does in his jurisdiction is not a source of moral claims by Betty. This allows high levels of change in some perspectives without affecting coordination on  $\{R\}$ .

- 4. Markets must be a primary modality of social coordination, as they provide bridges between the valuings and categorizations of different perspectives; even though two parties do not concur on the same value or categorizations of the objects traded, they can agree to trade on mutually acceptable terms.<sup>124</sup>
- 5. Polycentric systems can accommodate more extreme diversity by allowing some to forge some moral networks that are not shared by all. Feminists, libertarians or vegetarians may, on some issues, develop shared rules of reconciliation that are not endorsed by the entire moral order. All are not forced to play "We All Go My Way" games. <sup>125</sup> At times, as with sexual morality in the latter half of the twentieth century, widespread moral change emerges out of these narrower networks, eventually reconciling a larger moral order.

Note that some of these (points 1 and 3) recast familiar liberal commitments to freedom and rights, while point 2 stresses the importance of the formal features of rules, which are of long-standing importance in the liberal tradition, though perhaps less appreciated in current political philosophy. Similarly, point 5 revives traditional liberal themes about the importance of multiple levels of moral life. The stress of the same point of the

I stress that I have not argued for these here: I intend this list as simply illustrative of types of "design" analyses that are consistent with the complexity insight. Other New Diversity theorists stress institutional devices for learning, experimentation, and exchange. Others seek to understand how democratic self-governance can be critical in reiterative learning and regulating diverse and complex social systems. Self-organization ("bottom-up") and self-governance ("top-down") are different sources of order; complexity precludes some grander projects of self-governance, but even complex systems employ mechanisms of self-governance and collective experimentation. The type of self-governance consistent with moral complexity is itself a critical topic for inquiry.

<sup>124.</sup> This is a point stressed in Muldoon, Borgida & Cuffaro, *supra* note 69.

<sup>125.</sup> See supra Section IV.D.

<sup>126.</sup> See HAYEK, supra note 88, at 148-61.

<sup>127.</sup> See generally Jacob T. Levy, Rationalism, Pluralism and Freedom (2015).

<sup>128.</sup> MULDOON, *supra* note 7; MÜLLER, *supra* note 7.

<sup>129.</sup> See Jack Knight & James Johnson, The Priority of Democracy, 101 Am. Pol. Sci. Rev. 1 (2011); Landemore, supra note 8.

<sup>130.</sup> This is a critical theme of the work of the Ostroms. For a broader and insightful analysis of the relation between self-organization and self-governance see J.T. Ismael, *Self-Organization and Self-Governance*, 41 Phil. Soc. Sci. 327 (2011).

That the philosopher abjures constructing institutional blueprints and specifying end states thus by no means sounds the death knell of social and political philosophy. Rather than philosophy as advocacy of a preferred set of perspectives, it becomes an investigation into the nature of free, open, and dynamic diverse moral orders.